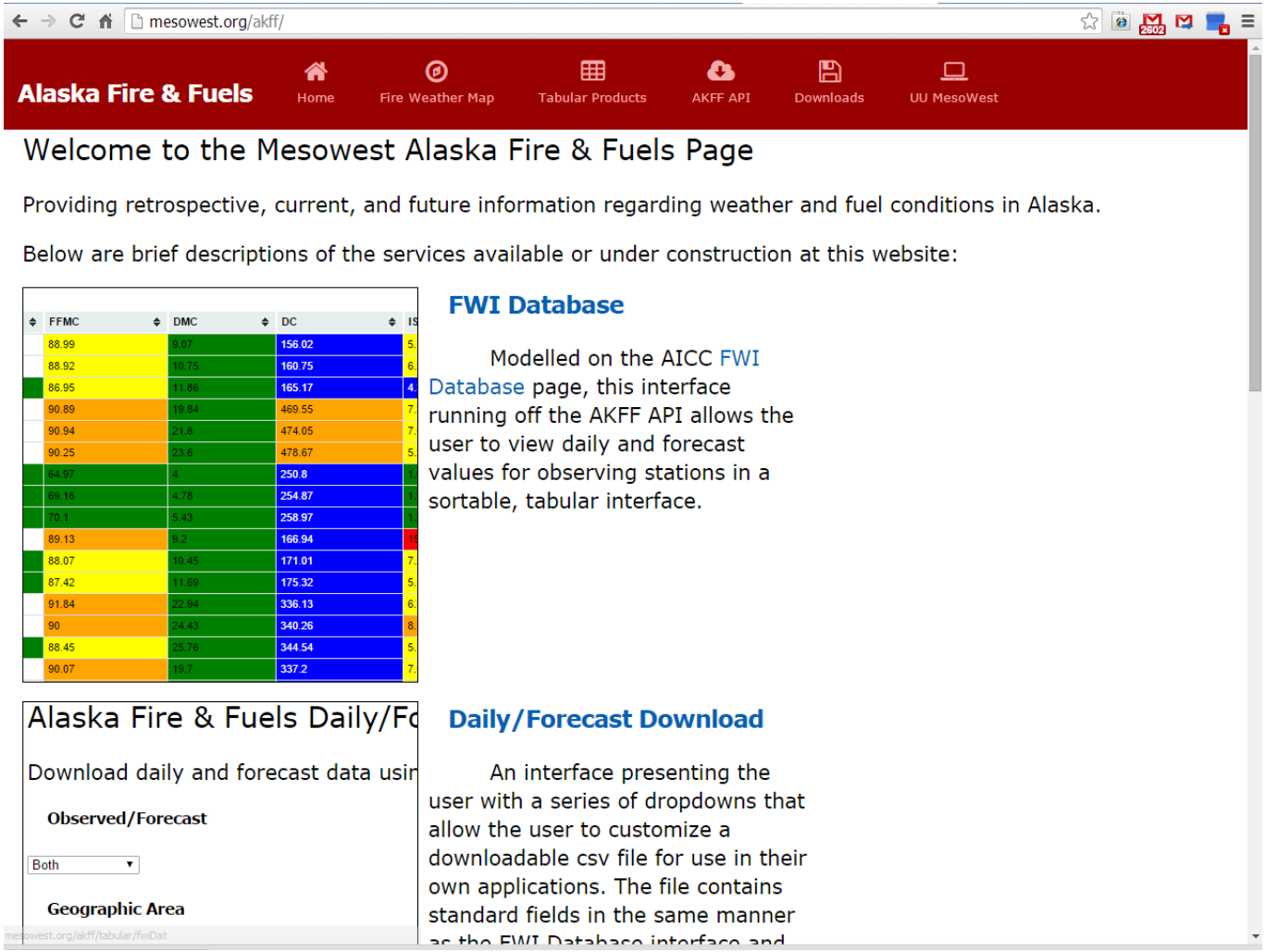
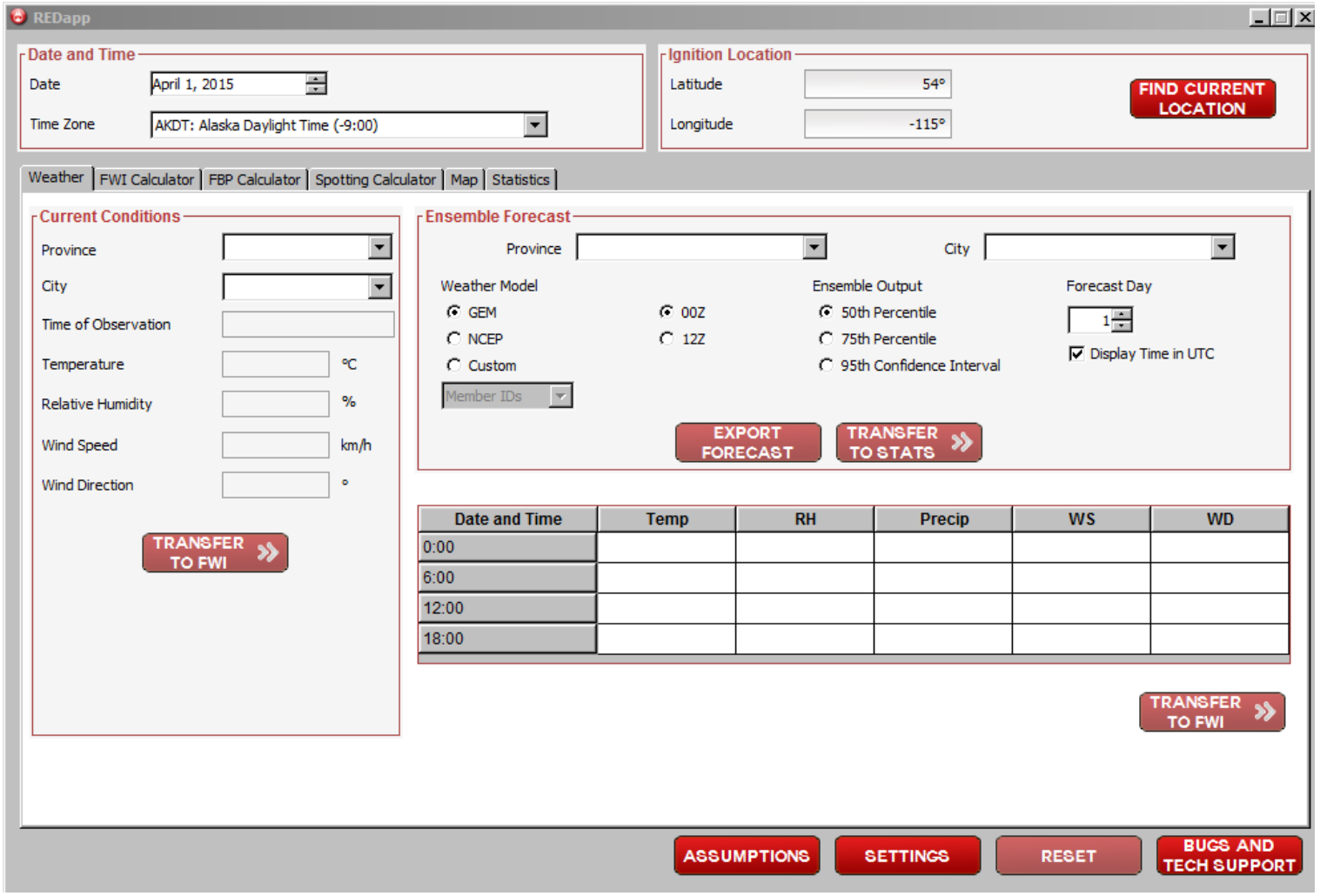
ACTION ITEMS UPDATE FROM THE 2014 CFFDRS SUMMIT

Alison York, Jennifer Northway, Kristi Bulock, Larry Weddle, Randi Jandt, Robert Ziel, Tom St. Clair

Mesowest.org/akff



REDapp—Full public release soon



AFSC- Fire Modeling And Analysis Committee Page

https://www.frames.gov/partner-sites/afsc/partner-groups/fire-behavior-modeling-group/

A JFSP Knowledge Exchange Consortium

AFSC Home | About | Events | Library | Partner Groups | Products & Tools | Projects | FRAMES Home

Alaska Fire Science Consortium > Partner Groups > Fire Behavior and Modeling Group

Fire Behavior and Modeling Group

HOW TO PARTICIPATE:

Looking for Beginner and Experienced WFDSS Modelers for 2015 Fire Season. Interested?

Sign Up Now

Contact:

Contact *Jennifer Barnes* at jennifer_barnes@nps.gov OR your agency representative.

Related Links

- WFDSS
- WFDSS Support Videos (YouTube)
- CFFDRS in Alaska
- Wildland Fire Management RD&A
- Fire Behavior Knowledge Base
- LANDFIRE
- AK LANDFIRE Webinar Series

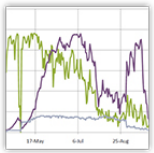
Fire behavior analysis is an ever-evolving field with new data, models, and information. Analysts can help fire managers to answer a variety of questions but it is difficult to stay informed on the tools available.

A proactive group of analysts, modelers, fuels specialists, and others have gathered to discuss these modeling tools and their application to fire management questions in Alaska. This informal group is open to anyone interested in learning more about fire behavior modeling.

The Alaska Wildland Fire Coordinating Group also charters a Fire Modeling and Analysis Committee to provide specific expertise to the interagency fire management community.

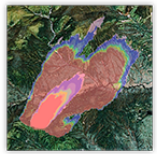
Fire Behavior and Modeling Highlights

Alaska Fire Modeling Guides & Products



A variety of both Alaska specific and general use products are available including information on fuel models, LANDFIRE fuels data, FSPro Analysis and more.

Alaska Fire Modeling Webinars & Workshops



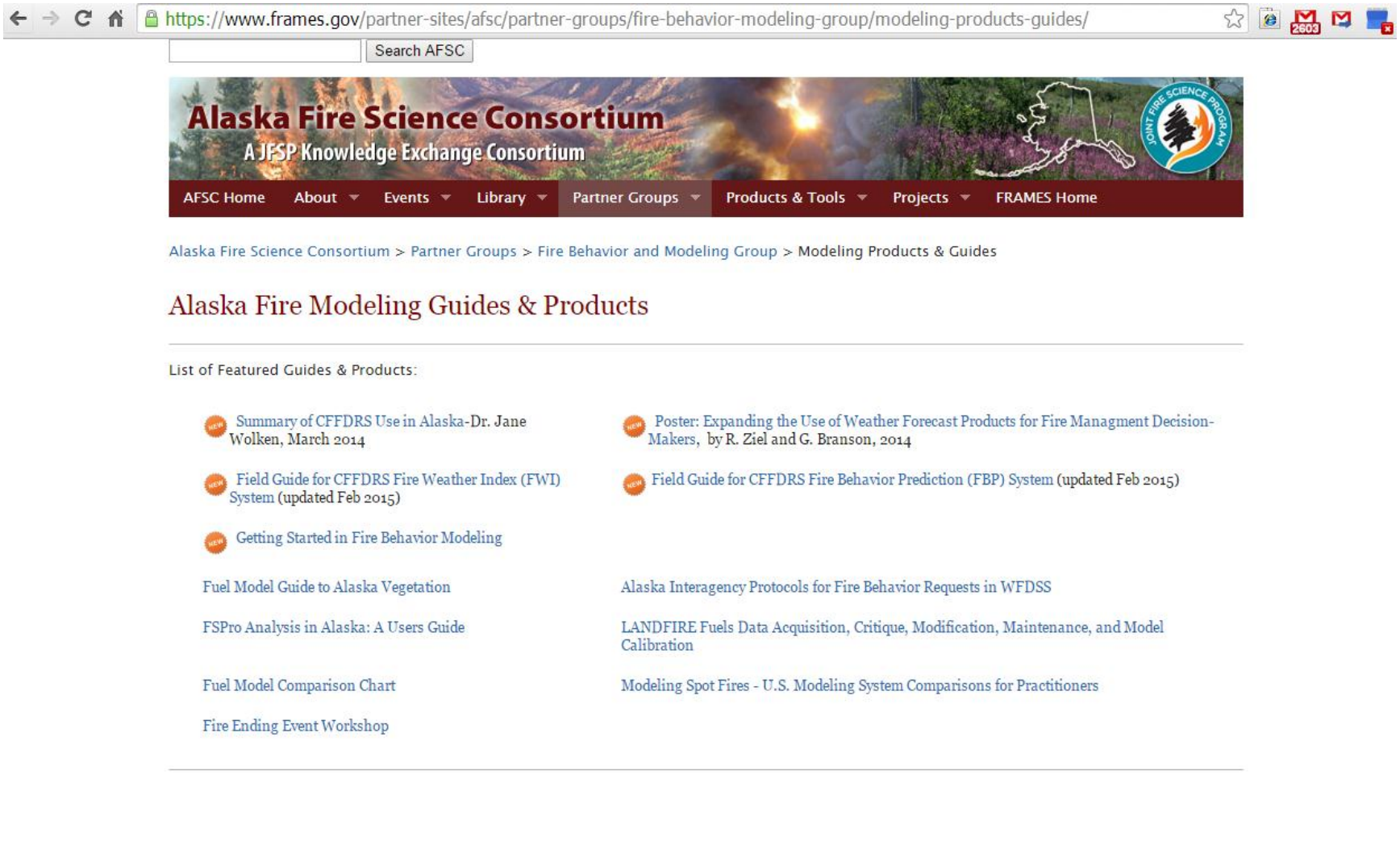
Find previous webinar videos, workshop materials and other related documents.

About FMAC

Find out more about the AWFCG Fire Modeling and Analysis Committee (FMAC). Contact your agency representative.

Note: Please do not cite any information posted from this group without consulting with the document creator. All data, graphs, discussion documents, etc. are for information purposes only and have not been through a peer review process.

Modeling Guides and Products



Grass Fuel Moisture Code and Grass Fuel Moisture %

2.4.1 Grass Fuel Moisture (Review estimates hourly)

Grass Fuel Moisture Code (GFMC), Natural fuel loads and mixed orientations

The **GFMC** estimates can be used in place of FFMC in the ISI and BISI tables (2.4.6 and 2.4.7) to estimate a Grass Initial Spread Index (GISI). GISI can be used in place of ISI to estimate fire behavior for fuel types O-1a & O-1b. Grass Fuel Moisture % estimate can be obtained by subtracting this GFMC value from 101.

GFMC		Relative Humidity (%)							
SOL_{ef}	**Temp**	**10%**	**20%**	**30%**	**40%**	**50%**	**60%**	**80%**	**100%**
Overcast	**41°F**	91	88	85	84	83	81	78	68
	50°F	92	89	87	85	84	83	79	69
	59°F	93	90	88	86	85	84	79	69
	68°F	94	91	89	88	86	84	81	71
	77°F	95	93	91	89	87	86	82	72
	86°F	96	94	92	90	89	87	83	72
Broken, Clouds > 50% of sky	**41°F**	94	91	89	87	86	85	83	81
	50°F	95	92	90	88	87	86	84	82
	59°F	95	93	91	90	88	87	85	83
	68°F	96	94	92	91	89	88	86	84
	77°F	97	95	93	92	91	90	87	84
	86°F	98	96	95	93	92	91	88	85
Scattered Clouds < 50% of sky	**41°F**	96	93	91	90	89	88	86	84
	50°F	96	94	92	91	90	89	87	86
	59°F	97	95	94	92	91	90	88	87
	68°F	97	96	95	93	92	91	90	88
	77°F	98	97	96	95	94	93	91	89
	86°F	99	98	97	96	95	94	92	90
Clear Skies	**41°F**	97	95	94	93	92	91	89	88
	50°F	98	96	95	94	93	92	90	89
	59°F	98	97	96	95	94	93	92	90
	68°F	98	97	97	96	95	94	93	91
	77°F	99	98	97	97	96	95	94	92
	86°F	99	99	98	98	97	96	95	94

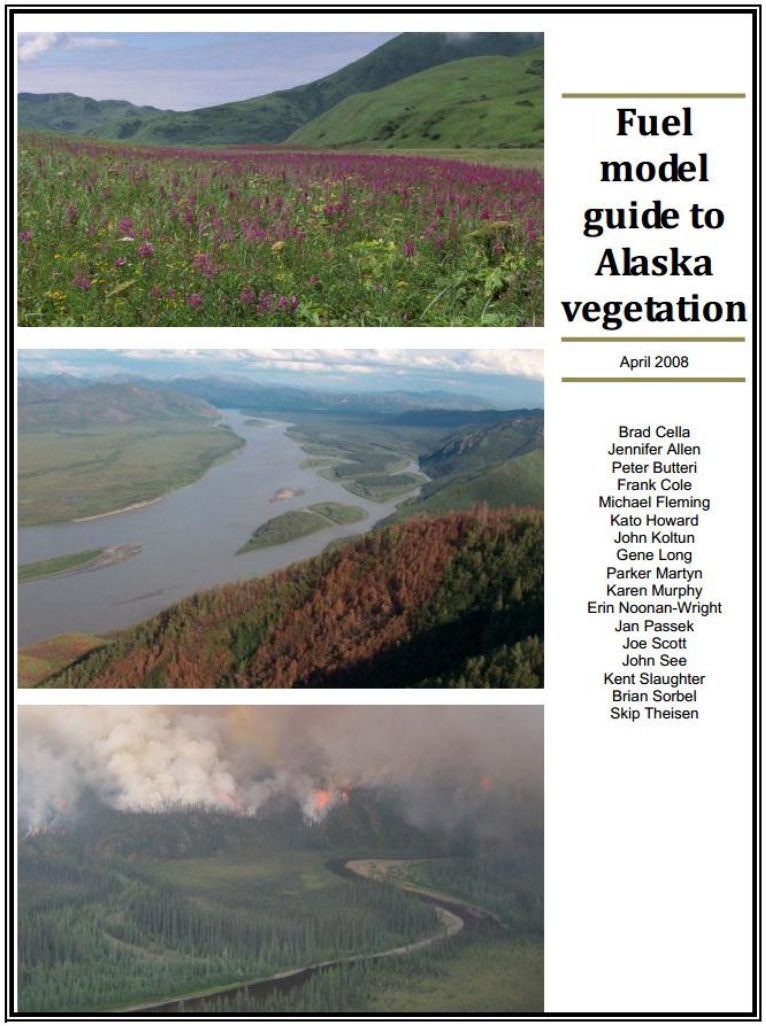
Kidnie, S.K., Wotton, B.M. and Droog, W.N. 2010. Field guide for predicting fire behaviour in Ontario's tallgrass prairie. Elgin County Stewardship Council Special Publication. Ontario Ministry of Natural Resources, Aylmer, Ontario. 65 p.

Grass Fuel Moisture (%), for dead, over-wintered standing dead grass in Alaska

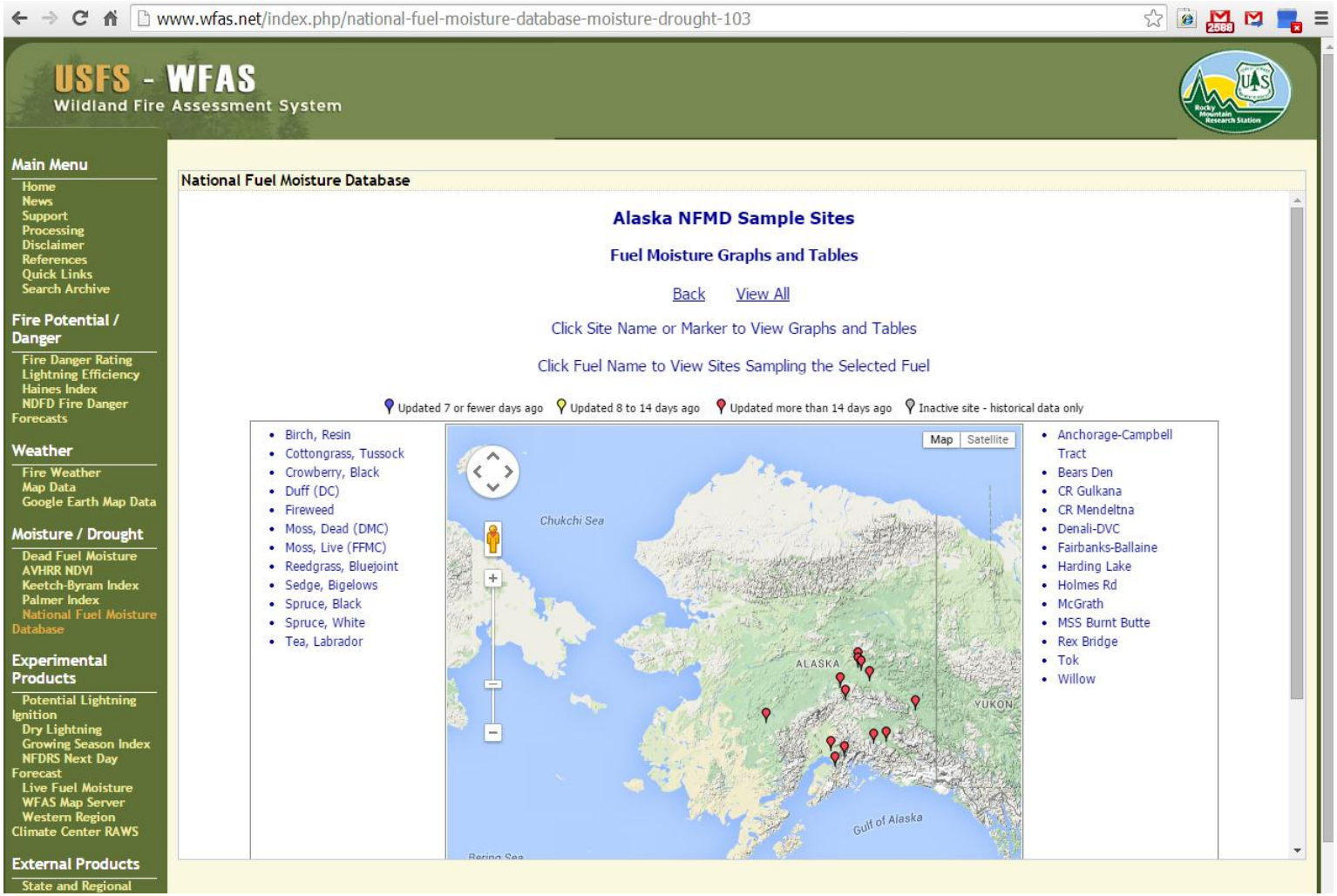
	Relative Humidity (%)																
Temp	**4**	**8**	**12**	**16**	**20**	**24**	**28**	**32**	**36**	**40**	**44**	**48**	**52**	**56**	**60**	**64**	**68**
30°F	6	7	8	9	10	10	11	12	12	13	14	15	15	16	17	18	19
40°F	6	7	8	8	9	10	10	11	12	12	13	14	15	15	16	17	18
50°F	5	6	7	8	8	9	10	10	11	12	12	13	14	15	15	16	18
60°F	5	6	6	7	8	8	9	10	10	11	12	12	13	14	15	16	17
70°F	4	5	6	7	7	8	9	9	10	10	11	12	12	13	14	15	16
80°F	4	5	6	6	7	8	8	9	9	10	11	11	12	13	14	14	16

From E. Miller, personal communication. Paper pending (January 2015)

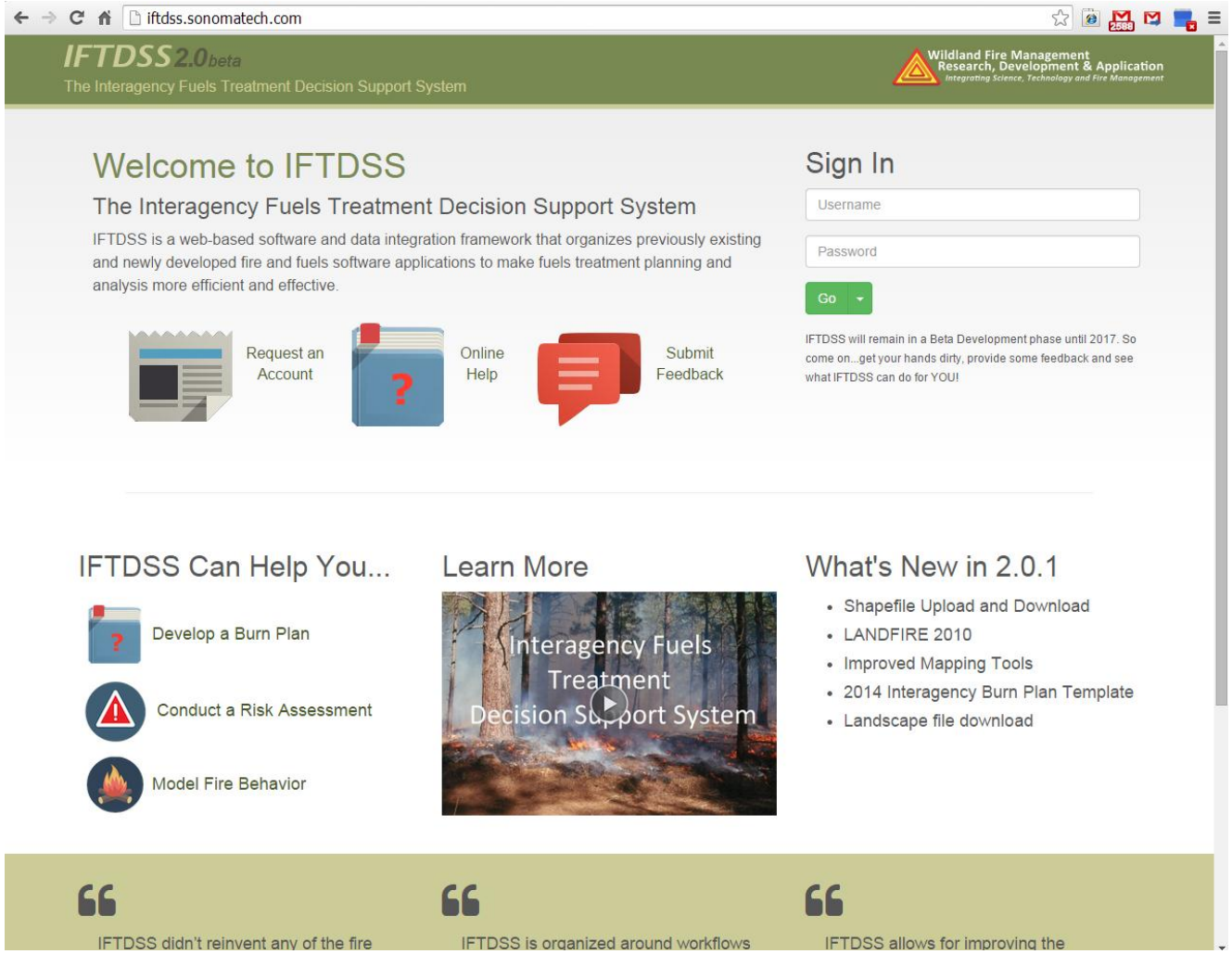
Undergoing revision during 2015



National Fuel Moisture Database



Interagency Fuels Treatment Decision Support System (IFTDSS)



Intro to CFFDRS class next week in Fairbanks and Soldotna

CAN491 - Introduction to Canadian Forest Fire Danger Rating System (CFFDRS) *No Course Description available* **Session Details**		04-09-2015 to 04-10-2015	**Alaska** Fairbanks, AK 99701	**Nom Form** Due: 03-09-2015 Late Noms Accepted	Cindy Forrest-Elkins **cindy . forrest *at* alaska . gov** Phone: 907-269-8441 Fax: 907-269-8921	(None)
				Nom Form	Cindy Forrest-Elkins	

2013 Can Creek Fire Photo: Zachary Jacobson, Pioneer Peak Hotshots